UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

## NOTICE OF ALLOWANCE AND FEE(S) DUE

09629

7590

02/26/2004

MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004 EXAMINER
LEWIS, MONICA

DD 11 10, 11101110

ART UNIT

PAPER NUMBER

2822

DATE MAILED: 02/26/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974.817	10/12/2001	Masaharu Muramatsu	046124-5099	8262

TITLE OF INVENTION: SEMICONDUCTOR DEVICE FOR DETECTING WIDE WAVELENGTH RANGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	05/26/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

			or ]		(703) 746-4000			
INSTRUCTIONS: This for appropriate. All further con indicated unless corrected maintenance fee notification	rm should be used for tran rrespondence including the below or directed otherwise as.	smitting the ISSU Patent, advance on in Block 1, by (a	E FEE and ders and noti ) specifying	PUBLIC fication a new co	ATION FEE (if req of maintenance fees prrespondence addres	uired). Blocks 1 through 4 s will be mailed to the current s; and/or (b) indicating a sep	should be completed where t correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004					Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.			
							(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAME	D INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/974,817	10/12/2001		Masaharu l	Muramat	su	046124-5099	8262	
TITLE OF INVENTION: S.	EMICONDUCTOR DEVIC	E FOR DETECTIN	NG WIDE WA	AVELEN	NGTH RANGES			
APPLN. TYPE	SMALL ENTITY	ISSUE F	EE	PU	BLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1330	)		\$300	\$1630	05/26/2004	
EXAM	INER	ART UNIT		CL	ASS-SUBCLASS	7		
LEWIS, I	MONICA	2822	2822 2		257-228000	<b>-</b>		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			names of agents OF firm (havi agent) and	up to ?, alternating as a d the nation or agent	on the patent front page, list (1) the to 3 registered patent attorneys or ernatively, (2) the name of a single a member a registered attorney or names of up to 2 registered patent ents. If no name is listed, no name  3			
PLEASE NOTE: Unless been previously submitte (A) NAME OF ASSIGN		low, no assignee d submitted under sej (B	ata will appe parate cover. ) RESIDENC	ar on the Complet CE: (CIT	patent. Inclusion of ion of this form is NO Y and STATE OR Co	assignee data is only approprion a substitute for filing an assount of the substitute for filing an assount of the substitute for filing an assount of the substitute of the substitute for the substitute of the		
4a. The following fee(s) are			. Payment of		The first teach	dorportunon or outer private g	coup cannot be go to cannot be	
☐ Issue Fee	•		•		ount of the fee(s) is e	nclosed.		
☐ Publication Fee ☐ Payment by credit			card. Form PTO-203	8 is attached.				
☐ Advance Order - # of	Copies		☐ The Direct Deposit Acc			charge the required fee(s), or (enclose an extra	credit any overpayment, to copy of this form).	
Director for Patents is reque	ested to apply the Issue Fee a	nd Publication Fee	(if any) or to	re-apply	any previously paid	issue fee to the application id	entified above.	
(Authorized Signature)		(Date)						
NOTE; The Issue Fee and other than the applicant; interest as shown by the re	d Publication Fee (if requir a registered attorney or ag cords of the United States Pa	ed) will not be ac ent; or the assigne- atent and Trademar	cepted from ee or other p k Office.	anyone arty in				
This collection of informa	ation is required by 37 CFR	1.311. The inform	nation is requ	uired to				

obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/974,817	09/974,817 10/12/2001		Masaharu Muramatsu	046124-5099	8262		
09629	7590	02/26/2004		EXAM	EXAMINER		
MORGAN LEWIS & BOCKIUS LLP			LEWIS, N	LEWIS, MONICA			
1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004		*		ART UNIT	PAPER NUMBER		
				2822			
				DATE MAILED: 02/26/200	4		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

			- Am
	Application No.	Applicant(s)	(mo
	09/974,817	MURAMATSU, MAS	SAHARU
Notice of Allowability	Examiner	Art Unit	
	Monica Lewis	2822	
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOT THE Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course. <b>THIS</b>
1. $\boxtimes$ This communication is responsive to <u>the amendment filed</u> 1	<u>12/15/03</u> .		
2. The allowed claim(s) is/are 1,2 and 5-9.			
3. The drawings filed on are accepted by the Examiner	;		
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority un a)  All b)  Some* c)  None of the:  1.  Certified copies of the priority documents have  2.  Certified copies of the priority documents have  3.  Copies of the certified copies of the priority documents have  International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" on the delow. Failure to timely comply will result in ABANDONMITHIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> <li>5.  A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give  6.  CORRECTED DRAWINGS (as "replacement sheets") must  (a)  including changes required by the Notice of Draftsperson  1)  hereto or 2)  To Paper No./Mail Date  (b)  including changes required by the attached Examiner's  Paper No./Mail Date 6/30/03.  Identifying Indicia such as the application number (see 37 CFR 1.6 each sheet. Replacement sheet(s) should be labeled as such in the  1.  DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F.</li> </ul>	been received.  been received in Application Nocuments have been received in this communication to file a reply ENT of this application.  tted. Note the attached EXAMINER's reason(s) why the oath or declarate be submitted.  on's Patent Drawing Review ( PTO-6: Amendment / Comment or in the Comment or in the Comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the header according to 37 CFR 1.121(comment of BIOLOGICAL MATERIAL in the biological in the biolo	national stage applical complying with the red S AMENDMENT or Nation is deficient.  948) attached office action of the last in the front (not the last).	quirements OTICE OF
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO-1449 or PTO/SB/06 Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 8), 7. ☑ Examiner's Amendn 8. ☐ Examiner's Stateme 9. ☐ Other	(PTO-413), e nent/Comment	ŕ

Application/Control Number: 09/974,817

Art Unit: 2822

## **EXAMINER'S AMENDMENT**

1. Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given via telephone by Robert J. Goodell on February 20, 2003.

The application has been amended as follows:

In claim 1, line 21 before "wider energy band", --a-- has been inserted.

In claim 1, line 22 before "a thin shape portion", "being etched so as to form" has been deleted.

In claim 1, line 22 before "a thin shape portion", --forming-- has been inserted.

#### Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica Lewis whose telephone number is 703-272-1838.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 703-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722 for regular and after final

\ \<u>\</u>

Application/Control Number: 09/974,817

Art Unit: 2822

communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

ML

February 20, 2004

Mary Wilczewski Primary Examiner Page 3